

REMARKS

This Amendment is being filed in response to the Final Office Action mailed October 5, 2007, which has been reviewed and carefully considered. Reconsideration and allowance of the present application in view of the amendments made above and the remarks to follow are respectfully requested.

In the Office Action, claims 1, 5 and 7-14 are rejected under 35 U.S.C. §102(b) as allegedly anticipated by U.S. Patent Application Publication No. 2003/0069494 (Jolly). Claims 2-4 and 6 are rejected under 35 U.S.C. §103(a) as allegedly unpatentable over Jolly in view of U.S. Patent No. 6,980,682 (Avinash). It is respectfully submitted that claims 1-20 are patentable over Jolly and Avinash for at least the following reasons.

In the Final Office Action, the paragraph spanning pages 6-7, in rejecting claim 4, it is correctly noted that the equation in recited in claim 4 is not taught or suggested in Jolly. However, it is alleged that equations in the abstract are not patentable, and that Jolly discloses features similar to that recited in claim 4.

It is respectfully submitted that the recitation of claim 4, in combination with the base claim 1, is not merely an equation in the abstract. Further, Jolly is primarily concerned with determining the myocardium contour. In addition, Avinash is directed to extracting a left ventricular endocardium using seed points and comparing neighboring pixel intensities, which is a very complicated and demanding method with regard to computational power, as described on page 2, line 22 to page 3, line 6 of the present application.

It is respectfully submitted that Jolly and Avinash, alone or in combination, do not teach or suggest the present invention as recited in independent claim 1, and similarly recited in independent claims 11 and 16 which, amongst other patentable features, requires:

calculating a total ED intensity value ($I_{T,ED}$) inside at least one of the endocardial contours at the ED,

applying the endocardial contours delineated at the ED to all phases of the cardiac cycle, and

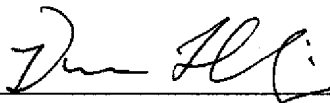
calculating the total LV interior volume based on intensity values for each of the phases inside the endocardial contours delineated at the ED and applied to all the phases, and the total ED intensity value ($I_{T,ED}$).

Accordingly, it is respectfully submitted that independent claims 1, 11 and 16 are allowable, and allowance thereof is respectfully requested. In addition, it is respectfully submitted that claims 2-10, 12-15 and 17-20 should also be allowed at least based on their dependence from independent claims 1, 11 and 16.

In addition, Applicants deny any statement, position or averment of the Examiner that is not specifically addressed by the foregoing argument and response. Any rejections and/or points of argument not addressed would appear to be moot in view of the presented remarks. However, the Applicants reserve the right to submit further arguments in support of the above stated position, should that become necessary. No arguments are waived and none of the Examiner's statements are conceded.

In view of the above, it is respectfully submitted that the present application is in condition for allowance, and a Notice of Allowance is earnestly solicited.

Respectfully submitted,

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